PURIFICATION OF 1,1,1,3,3-PENTAFLUOROPROPANE

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Abstract of **JP10017501**

PROBLEM TO BE SOLVED: To purify the subject compound useful for a foaming agent, etc., from a mixture, without requiring a corrosion resistant facility, in a good efficiency, at a low cost and safely by bringing the mixture containing the subject compound and hydrogen fluoride into contact with a specific extractant, obtaining a extractant phase by separating the mixed liquid and then recovering the compound by a separation. SOLUTION: This method for purifying 1,1,1,3,3-pentafluoropropane, comprises bringing (A) a mixture containing 1,1,1,3,3-pentafluoropropane (A1) and hydrogen fluoride into contact with (B) an extractant of at least one kind of compound selected from compounds of formula I [(x) is 3-10; (y) is 2-22; (z) is 0-6], formula II (R1 to R3 are each a 1-10C fluoroalkyl and may each contain up to two H's), formula III (R4 , R5 are each a 1-10C alkyl and at least one of them contains one F) and formula IV [(l) is (x); (m) is (y); (n) is (z)]; obtaining an extractant phase consisting of the (A1) and the component (B) by separating the mixed liquid, and recovering the (A1) by a separating. Further, it is preferable that the contact be performed by using the component (B) in an amount of 0.3-30mol fold to the (A1), and the liquid separation be performed at a temperature of (-)30-100 deg.C and a pressure of 1-30atm.

$$C_x F_y H_z \quad \text{I}$$

$$R_1 R_2 R_3 N \quad \text{II}$$

$$R_4 O R_5 \quad \text{III}$$

$$C_l Cl_m H_n \quad \text{IV}$$

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